11th International EME Conference

New Jersey, USA, August 6-8 2004

Summary of Events

The 11th International EME Conference took place on August 6-8 in the Princeton-Trenton area of central New Jersey, USA. 75 participants from 14 countries attended the technical talks and other planned events.

The activities started on Thursday August 5th at 6 PM at the Amerisuites Hotel in Princeton, New Jersey. Approximately 80 percent of the participants attended the Hospitality Room. Initially planned until 9 PM, the gathering extended until midnight. Beer, wine and food were available. Registration also took place in the same room. The conference package included:

- Conference Proceedings (printed and in CD)
- EME2004 T-shirt
- Banquet ticket
- · Door prize ticket
- Folder with information such as maps, program, note pad, pen, etc.
- Surprise present (choice of leather note pad or portable cooler)
- Various presents were also given to all family members who took part in the family program.

On Friday morning, the conference kicked off with the technical presentations, this time at The College of New Jersey. Food was available early in the morning for those who could not have breakfast in the hotel. Some participants who could not attend the Hospitality Room because they arrived on Friday morning were quickly registered before the conference or during the first coffee break. Coffee breaks were available throughout the day, and lunch was also available at no extra charge. Technical presentations on Friday included "Transceiver Clinic introduction", by Leif Åsbrink SM5BSZ, "Using the SDR-1000 as a 2 meter EME IF", by Bob McGwier N4HY, "High accuracy Doppler shift computing", by Franck Tonna F5SE, "The W2DRZ Antenna Controller board and software", by Russ Pillsbury K2TXB, "Small Offset Stressed Dish for Portable 1296 EME", by Allen Katz K2UYH, "Circular polarization feed with septum", by Zdenek Samek OK1DFC, "500 watt 23 cm Power Amplifier with 2xGI7B", by Marc Franco N2UO, "EME receiving system optimization", by Paul Chominsky WA6PY, "A Modified Dual Dipole Dish Feed for 432 MHz", by Peter Blair G3LTF, and "You Know You Have Become a REAL VHF/UHF Weak Signal Operator When...", by Doug Millar K6JEY.

On Friday night the participants were invited to attend either Al Katz K2UYH's or Joe Taylor K1JT's homes for a reception which included dinner and drinks, plus the usual station tours.

Saturday morning started with more technical presentations which extended right after lunch, which was again available to the participants. The technical presentations included "Multi-reflector antennas", by Paul Wade W1GHZ, "Fundamental limits on weak-signal communication", by Joe Taylor K1JT, "2003 JW/SM2BYA 432 MHz EME operation", by Gudmund Wannberg SM2BYA, and "Progress toward 47 GHz EME", by Gary Lauterbach AD6FP.

On Saturday afternoon the participants had the chance to use start-of-the-art test equipment (NF meter, Network Analyzer, Spectrum Analyzer, etc.). Some participants displayed items for sale or swap. Several commercial products were also offered. Leif Åsbrink SM5BSZ ran his traditional "transceiver clinic", and some participants had the chance to have their radios measured and to take a closer look at Leif's "Linrad", Linux-based software defined radio.

Saturday night was reserved for the banquet, which took place also at The College of New Jersey, with Joe Taylor K1JT as the keynote speaker. Awards were presented to all the participants who took part of the technical presentations. Also, in appreciation to all the international and local attendees, one flag of each country with representation at the Conference was presented to participants from that country. To wrap up the night, a good number of door prizes for hams and their spouses were drawn, all of them donated by generous participants and the Conference sponsors.

Sunday featured the <u>EME Forum</u> co-chaired by Peter Blair G3LTF and Al Katz K2UYH. Several topics were discussed. Among the most relevant were methods to increase the EME activity and Galileo satellite interference issues. Finally, Dave Powis DL4MUP, representing Rainer DF6NA, proposed the next EME Conference to take place in Germany. The participants of the forum unanimously approved the motion.